

***Listing of Claims:***

1. (Previously Presented) A collaboration space created as a web site by a user at a browser including a plurality of rooms in a hierarchical structure with access control list control on rooms and access control list control on forward pointers to child rooms, comprising:

said web site residing in a memory of a web server and including a place comprising a plurality of subrooms, each subroom being an independent entity belonging to said place said web server including an HTTP server interfaced with the Internet,

said place having a first data note including a directory of members of said place and

each subroom within said place having a data note associated therewith containing an access control list of members selected exclusively from said directory of members by a member of said place having manager authority with respect to said subroom for specifying users of said place authorized to access said subroom;

forward and reverse pointers for linking said subrooms, each said forward pointer to a child room including indicia identifying said child room, indicia specifying the address location of the entity forming said child room, and a readers field for providing access control list control on said forward pointer;

said readers field being a members object for identifying those members of said subset of members of said place authorized to access a parent subroom that are

also authorized to access a child subroom and for each member of said subset of members a level of authorization;

a document readers field for a document containing data in said subroom being a members object for identifying a subset of members of said place authorized to access a subroom who are also authorized to access said document; and

said collaboration space comprising a hierarchy of rooms, each room being a place in collaboration space including said directory of members; said directory of members, said access control list of members, and said readers field selectively providing increased, decreased, and maintained access to a child place in collaboration space, with access at any level of authority to a child place enabled only for those authorized to access a corresponding parent place, and whether a link to a child place will be enabled for a specific user in its corresponding parent place.

2. (Original) The collaboration space of claim 1, said levels of authorization including manager, author, and reader.

3. (Previously Presented) A collaboration space created as a web site by a user at a browser, comprising:

a place included in said web site, said web site residing in a memory of a web server, said place comprising a plurality of rooms in a hierarchical structure linked by forward and backward pointers, said web server including an HTTP server interfaced with the Internet;

a member directory for said place identifying users authorized to enter said place;

each said room comprising one or more pages, and for each said room a members object for identifying a subset of members of said place authorized to access said room and for each member a level of authorization, each member of said subset of members being a user authorized in said member directory to enter said place;

said rooms including a parent room and a child room, and said pointers comprising forward and backward pointers for enabling the security of each said room to be independently managed, said forward pointers including indicia identifying said child room, indicia specifying the address location of the database forming said child room, and a readers field for providing access control list control on said forward pointer, said readers field for identifying those members of said subset of members of said place authorized to access a parent room that are also authorized to access a child room; and

said collaboration space comprising a hierarchy of rooms, each room being a place in collaboration space including a member directory; said member directory, said members object, and said readers field selectively providing increased, decreased, and maintained access to a child place in collaboration space, with access at any level of authority to a child place enabled only for those authorized to access a corresponding parent place, and whether a link to a child place will be enabled for a specific user in its corresponding parent place.

4. (Previously Presented) The collaboration space of claim 3, said readers field including an access authority for each reader authorized to enter said room selectively as manager, author or manager.
5. (Previously Presented) The collaboration space of claim 3, each said forward pointer being a secure pointer by carrying the same level of security as the child room to which it points.
6. (Previously Presented) The collaboration space of claim 5, each said forward pointer carrying in said readers field the same security as that of the subroom to which it points.
7. (Previously Presented) The collaboration space of claim 6, further comprising a display for presenting to a specific user viewing a parent room a listing of its subrooms, said listing including for said specific user only those subrooms for which said readers field in said forward pointer includes an entry authorizing access by said specific user.
8. (Canceled)
9. (Previously Presented) A method for controlling access to rooms:  
  
maintaining for a collaboration place an access control list identifying those users authorized to enter said place, said collaboration place including said rooms within said collaboration place and created as a web site by a user at a browser, said web site residing in a memory of a web server including an HTTP server interfaced with the Internet;  
  
providing forward and reverse pointers linking said rooms in a hierarchical structure within said place, said forward pointers including indicia identifying a

child room, indicia specifying the address location of the database forming said child room, and a readers field for providing access control list control on said forward pointer, said readers field exclusively specifying a subset of said users authorized to enter said place;

displaying a parent room to a specific user, said parent room including a list of children rooms for which said readers fields on said forward pointers authorize said specific user access; and

said collaboration space comprising a hierarchy of rooms, each room being a place in collaboration space including an access control list; said access control list and said readers field on forward links from a parent place to a child place selectively providing increased, decreased, and maintained access to said child place in collaboration space, with access at any level of authority to said child place enabled only for those authorized to access a corresponding parent place, and whether a link to a child place will be enabled for a specific user in its corresponding parent place.

10. (Previously Presented) A method for creating a child room within a collaboration place data base created as a web site by a user at a browser, comprising:

providing for said collaboration place data base a first access control list identifying users authorized to access said data base, said collaboration place database created as said web site, said web site residing in a memory of a web server including an HTTP server interfaced with the Internet;

providing for said child room a back pointer to a parent room; and

providing at said parent room for said child room a forward pointer from said parent room to said child room, said pointer including indicia identifying said child room, indicia specifying the address location of the database forming said child room, and a readers access field listing a subset of users in said first access control list who are users authorized to access said child room for providing a second access control list specific to said forward pointer;

initially including in said readers access field for a child room created from a form users identified in a form access list identifying users authorized to read rooms created from said form;

limiting reader access in said readers access field to said child room for a specific user to no more than the access granted said specific user in said first access control list; and

said collaboration space comprising a hierarchy of rooms, each room being a place in collaboration space including an access control list; said access control list and said readers access field on forward links from a parent place to a child place selectively providing increased, decreased, and maintained access to said child place in collaboration space, with access at any level of authority to said child place enabled only for those authorized to access a corresponding parent place, and whether a link to a child place will be enabled for a specific user in its corresponding parent place.

11. (Canceled)
12. (Canceled)
13. (Previously Presented) A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform a method for controlling access to rooms said method comprising:

maintaining for a collaboration place a first access control list identifying those users authorized to enter said place, said collaboration place including said rooms within said collaboration place and created as a web site by a user at a browser, said web site residing in a memory of a web server including an HTTP server interfaced with the Internet;

providing forward and reverse pointers linking said rooms within said place, said forward pointers including indicia identifying a child room, indicia specifying the address location of the database forming said child room, and a second access control list including a readers field specifying each user having manager, author, and reader access to said child room, said readers field exclusively specifying a subset of said users authorized to enter said place;

displaying a parent room to a specific user, said parent room including a list of children rooms for which said readers fields on said forward pointers authorize said specific user access; and

said collaboration space comprising a hierarchy of rooms, each room being a place in collaboration space including an access control list; said first access

control list, and second access control lists on forward links from a parent place to a child place, selectively providing increased, decreased, and maintained access to said child place in collaboration space, with access at any level of authority to said child place enabled only for those authorized to access a corresponding parent place, and whether a link to a child place will be enabled for a specific user in its corresponding parent place.

14. (Canceled)

15. (Previously Presented) A computer program product for controlling access to rooms, comprising:

a computer readable medium;

first program instructions for maintaining for a collaboration place a first access control list identifying those users authorized to enter said place, said collaboration place including said rooms within said collaboration place and created as a web site by a user at a browser, said web site residing in a memory of a web server including an HTTP server interfaced with the Internet;

second program instructions for providing in a parent room second access control list identifying a subset of those user authorized to enter said place who are also authorized to enter said parent room with manager, author, or user access;

third program instructions for providing forward and reverse pointers linking said parent room with a child room in a double-linked list within said place, said forward pointers having a readers field providing a third access control list on said



forward pointer, said third access control list providing access to said child room for those members who are included in said second access control list who are also authorized to access said child room;

fourth program instructions for displaying a parent room to a specific user, said parent room including on said forward pointers a list of children rooms for which said readers fields authorize said specific user access;

fifth program instructions establishing said collaboration space as comprising a hierarchy of rooms, each room being a place in collaboration space including an access control list; said first access control list, said second access control list, and said third access control list selectively providing increased, decreased, and maintained access to said child place in collaboration space, with access at any level of authority to said child place enabled only for those authorized to access a corresponding parent place, and whether a link to a child place will be enabled for a specific user in its corresponding parent place; and wherein

said first, second, third, fourth, and fifth program instructions are recorded on said computer readable medium and executable by a machine.